

Before the  
Federal Communications Commission  
Washington, DC

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of )  
 )  
Amendment of Section 202(b), )  
Table of Allotments, ) RM-  
FM Broadcast Stations )  
(Volcano , Hawaii) )

To: Chief, Allocations Branch

**PETITION FOR RULEMAKING**

Li Hing Mui, Inc. ("LHM"), permittee of Station KKOA, Volcano, Hawaii, by its attorney, hereby requests that the Commission amend the Table of Allotments as follows:

| <u>Community</u> | <u>Current</u> | <u>Proposed</u> |
|------------------|----------------|-----------------|
| Volcano, Hawaii  | 299A           | 299C1           |

In support thereof, the following is stated:

LHM is the permittee of Station KKOA, Channel 299A, Volcano, Hawaii. This Volcano, Hawaii allotment can be upgraded to Channel 299C1 in full accord with the Commission's spacing rules. Attached hereto is a Technical Statement which demonstrates that Channel 299C1 can be substituted for Channel 299A at 19° 26' 00" N, 155° 15' 42" W, the reference coordinates for the community of Volcano, which will prevent any shortspacing from occurring with any currently authorized or proposed facility.

Adoption of this proposal will be in the public interest. As demonstrated in the Technical Statement, approval of this proposal will allow LHM to improve the service that it provides to the public by increasing its service to the Island of Hawaii.

Accordingly, LHM respectfully requests that the Commission amend the FM

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Table of Allotments to substitute Channel 299C1 for Channel 299A pursuant to Section 1.420(g) of the Commission's Rules. LHM will promptly file an application for issuance of a construction permit to permit LHM to operation on Channel 299C1 in lieu of Channel 299A. Insofar as LHM is proposing to upgrade an allotment on the co-channel on which it is authorized to operate, it is not appropriate that the Commission accept any competing expressions of interest for the allotment that may be filed by any outside party.

WHEREFORE, it is respectfully requested that this Petition be adopted, and the Commission request comment on the proposal contained herein.

Respectfully submitted,

LI HING MUI, INC.

By: 

Dan J. Alpert

Its Attorney

1250 Connecticut Ave., NW  
#700  
Washington, DC 20036  
(202) 637-9158

April 16, 1993

**LiHingMui, Inc.**

**Separation Study**

**Petition to Amend the Table of Allotments**

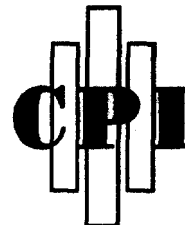
**Channel 299, Volcano, Hawaii**

**April 6, 1993**

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**Caughill-Palitz, Inc., Honolulu, Hawaii 96826**

**1750 Kalakaua Ave. #3-120 (800) 222-4274 / (808) 941-3618**



**LiHingMui, Inc.**  
**Separation Study - Petition to Amend the Table of Allotments**  
**Channel 299, Volcano, Hawaii**  
**April 6, 1993**

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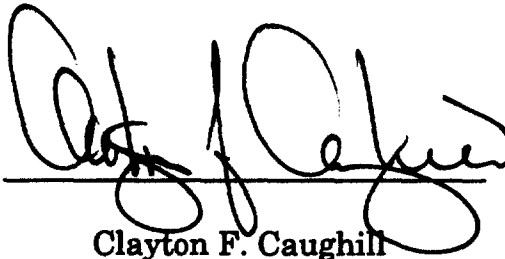
- Declaration
  - Use Restrictions
  - Statement of Circumstances
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  - Summary
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- FM Spacing Study - Computer Print

**LiHingMui, Inc.**  
**Separation Study - Petition to Amend the Table of Allotments**  
**Channel 299, Volcano, Hawaii**  
**April 6, 1993**

**Declaration**

I, Clayton F. Caughill, declare and state that I am certified by the Society of Broadcast Engineers as a Professional Broadcast Engineer, the holder of an FCC General Radiotelephone Certificate, and that my qualifications are known to the Federal Communications Commission, and that I am President of the firm Caughill-Palitz, Inc. and that firm has been retained by LiHingMui, Inc., permittee of Station KKOA (CP) for the purpose of determining the technical feasibility of substituting the assignment of Channel 299C1 for Channel 299A at Volcano, Hawaii.

All facts contained herein are true of my own knowledge except wherein stated to be on information and belief, and as to those facts, I believe them to be true.

  
Clayton F. Caughill

Executed on the 6th day of April, 1993

**LiHingMui, Inc.**  
**Separation Study - Petition to Amend the Table of Allotments**  
**Channel 299, Volcano, Hawaii**  
**April 6, 1993**

**Use Restrictions**

The information contained in this study was prepared for the sole use of LiHingMui, Inc., in petitioning the Federal Communications Commission to amend the Table of Allotments, substituting Channel 299C1 for Channel 299A at Volcano, Hawaii.

The copying, duplication or other such transfer of these materials or the information contained herein, either whole or in part, is prohibited without the express written consent of Caughill-Palitz, Inc., save for the following two exceptions:

1. Use by the Federal Communications Commission pursuant to their processing and otherwise deciding upon the merits of the above-described petition; and,
2. The duplication of these materials for the sole purpose of examination by parties interested in the nature of this petition.

Any other use of these materials, including the complete or partial incorporation of photocopies or data into other FCC applications or petitions, may cause Caughill-Palitz, Inc. to pursue all legal and administrative remedies available, including but not limited to civil suit(s) and the Petition(s) to Deny or Oppose the offending application(s) and/or petition(s).

**Statement of Circumstances**

The State of Hawaii is divided into four counties. The largest county is Hawaii County, encompassing the entire Island of Hawaii, some 10,448.5 square kilometers in land area. This island is divided by two large mountains, the dormant volcano Mauna Kea to the North, and Mauna Loa to the South. On the southeastern slopes of Mauna Loa is the Kilauea Caldera and the nearby community of Volcano. Although the population centers are Hilo on the eastern side of the island and the Kona area on the western side, new population growth is occurring in the Volcano area. This is the immediate vicinity of the Hawaii Volcano National Park. Population is spread among a group of communities including Glenwood, Kalapana, Kaimu, Pahala, Punaluu, Mountain View, Pahoa, Na'alehu, and the Puna District, roughly centered on Volcano.

Due to the topographical conditions, FM coverage of the eastern side of the island from stations on the western side and from stations located on the other Hawaiian Islands is precluded by the high mountains (over 3,100 meters). Coverage of communities to the south of Volcano from any of these stations is limited and many of those communities listed have no FM coverage without terrain shielding.

The population of the Volcano area is expanding in the various surrounding communities and the economy is stable, with many of the residents serving the expanding tourist center of Volcano National Park. Because of the number of individual small communities and the distances that separate them, providing service to the general population centered on Volcano is difficult within the confines of a Class A Channel.

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**Statement of Circumstances - Cont'd.**

The petitioner is desirous of increasing his potential for coverage of the entire Volcano area, including the surrounding communities, and therefore seeks substitution of Channel 299C1 for Channel 299A at Volcano, Hawaii. This study will demonstrate that the proposed amendment meets all FCC requirements with respect to separation from other facilities. The petitioner will file a construction permit application specifying Class C1 facilities when the amendment to the Table of Allotments becomes effective.



**LiHingMui, Inc.**  
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**SEPARATION STUDY - NARRATIVE STATEMENT**

**Reference Coordinates**

The petitioner holds a Construction Permit on the channel under study (299A). A study was first made using the geographical coordinates for community of Volcano as per CFR Section 73.208(a)(1). The channel met all spacing criteria using those coordinates and a Class C facility could be constructed in the immediate vicinity.

The computer analysis indicated that although sufficient spacing existed for such construction, that the spacing between the reference coordinates for Volcano and the geographical coordinates for Channel 246C2 held by KFSH in Hilo, 10.7 MHz. below the channel under study was close (3.173 km.). The petitioner recommends that although sufficient spacing exists to provide Volcano with Class C facilities on Channel 299, that the public interest would be better served by amending the Table of Allotments to specify Channel 299C1. This will allow additional choices for site placement within the Volcano area, while reducing the potential for I.F. products resulting in receiver induced interference between Channels 299C1 and 246C2.

**Search Area**

Only facilities and allotments within the State of Hawaii are considered in this study. Volcano is over 3,900 km from Los Angeles, CA, and over 3,700 km from San Francisco, CA. There are no land areas under FCC jurisdiction with FM allotments within 3,500 km. of Hawaii.

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**Spacing Study**

The Attachment is a spacing study done by computer utilizing the FCC database. The computer program has retrieved all records pertinent to the study, which consist of all geographically "close" records for the same channel (co-channel), 1, 2, or 3 channels removed (1st, 2nd, & 3rd adjacent), and 53 or 54 channels removed (intermediate frequency). Records were retained which fell within the commercial spacing table from the FCC rules with the addition of a safety zone specified at the time the program was run. If no records were found within this distance, the nearest record for that channel was retrieved. If no records were found within 3500 km., the channel was simply identified as clear without further notation.

The records have been sorted by channel and printed on the attached report. Each facility record entry on the attached report is accompanied by a required separation distance. This value is selected from the separation table from the FCC rules.

**Summary**

Analysis of the attached spacing study shows that the proposed substitution of channel 299C1 for channel 299A at Volcano, Hawaii exceeds all of the Commission minimum distance separation requirements. The Table of Allotments should be amended to reflect this substitution without site restriction, except that a spacing greater than 27 km. be maintained between the tower site chosen for Channel 299C1 and the present geographical coordinates of KFSH, Hilo, Hawaii on Channel 246C2.

FM Spacing study

Title: LiHingMui, Inc., KKOAA, Volcano, HI  
Channel 299C1 (107.7 MHz)  
Database: FCC 02/23/93

Latitude: 19-26-00  
Longitude: 155-15-42  
Safety zone: 100 km

| Call   | Auth  | Licensee name            | Chan  | ERP-kW | Latitude  | Br-to | Dist. | Req.  |
|--|-------|--------------------------|-------|--------|-----------|-------|-------|-------|
| City of License  | St    | FCC File no.             | Freq  | EAH-m  | Longitude | -from | (km)  | (km)  |
| ALLOC  |       |                          | 245C1 |        | 21-58-48  | 304.2 | 512.9 | 34    |
| Lihue  | HI    | DOC-83-33                | 96.9  |        | 159-22-30 | 122.8 | 478.9 | CLEAR |
| Filing window 12/13-01/13/86 **CLOSED** ; ADOPTED 1-10-84  |       |                          |       |        |           |       |       |       |
| KFSH   | LIC   | University of the Nation | 246C2 | 40     | 19-45-33  | 19.0  | 38.17 | 27    |
| Hilo   | HI    | BLH-850814KV             | 97.1  |        | 155-08-33 | 199.0 | 11.17 | CLOSE |
| ALLOC  |       |                          | 246C2 |        | 19-45-33  | 19.0  | 38.17 | 27    |
| Hilo   | HI    |                          | 97.1  |        | 155-08-33 | 199.0 | 11.17 | CLOSE |
| Coordinates updated from LIC record BLH850814KV  |       |                          |       |        |           |       |       |       |
|  |       |                          | 296   |        |           |       |       | 77    |
|  |       |                          | 107.1 |        |           |       |       | CLEAR |
|  |       |                          | 297   |        |           |       |       | 77    |
|  |       |                          | 107.3 |        |           |       |       | CLEAR |
|  |       |                          | 298   |        |           |       |       | 133   |
|  |       |                          | 107.5 |        |           |       |       | CLEAR |
| ALLOC (Community of VOLCANO)   |       |                          | 299A  |        | 19-26-00  | .0    |       | 200   |
| Volcano  | HI    | DOC-88-321               | 107.7 |        | 155-15-42 | .0    | -200  | SHORT |
| Filing window 01/22-02/21/90 **CLOSED** ; Effective 1-19-90  |       |                          |       |        |           |       |       |       |
| NEW  | APC   | T.C. Monte, Inc.         | 299A  | 6      | 19-26-10  |       |       |       |
| Volcano  | HI    | 900220MH                 | 107.7 | 100    | 155-13-55 |       |       |       |
| Application Dismissed 4-27-90-Pet for Recon filed 900531-Pet for recon denied 920507-Application for Review 920608 |       |                          |       |        |           |       |       |       |
| KKOAA  | CP    | Mary Milo-Finley         | 299A  | 3      | 19-29-08  | 350.0 | 5.869 | 200   |
| Volcano  | HI    | BPH-900220MK             | 107.7 | 64     | 155-16-17 | 170.0 | -194  | SHORT |
| DOC-91-185 Engineer's Note: Present LiHingMui, Inc. Construction Permit  |       |                          |       |        |           |       |       |       |
| ALLOC  | Note: | Now Lic. KGUY, Aiea, HI. | 300C  |        | 21-22-30  | 308.2 | 352.4 | 209   |
| Aiea   | HI    | DOC-84-534               | 107.9 |        | 157-56-12 | 127.3 | 143.4 | CLEAR |
| Filing window 09/27-10/28/85 **CLOSED** ; EFFECTIVE 9-26-85 Engineer's Note: (BLH-920828KG)                        |       |                          |       |        |           |       |       |       |

>> End of channel 299C1 study <<